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ABSTRACT

In its unabridged French version this document reviews research resulting from cooperation between university teachers, students, and representatives of industrial and commercial firms in the Paris area. The research was carried out at a period when the aims and organization of higher education in economic science in French universities had become the target of much contradictory criticism and was designed to achieve three objectives: (1) a tentative analysis of the feelings and attitudes of each of the groups concerned (students, teachers, and employers) with regard to the first (license essciences economiques) and the higher degree (Diplome d'etudes superieures or DES); (2) a survey of the attitudes and preferences of the three groups with regard to any changes likely to be made in the DES in economic science of Paris X-Nanterre, so as to meet their requirements; and (3) the use of statistical and econometric analysis to permit a methodological confrontation of preferences common to a number of subgroups revealed by the analysis of the data collected. This English version presents conclusions of the study and opinions expressed by students, teaching staff, and employers. (Author/KE)

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centre for educational research and innovation

*STUDIES IN INSTITUTIONAL MANAGEMENT IN HIGHER EDUCATION*
*- UNIVERSITE DE PARIS X - NANTERRE -*

# CURRICULUM REVISION

## A METHODOLOGICAL APPROACH

## - MAIN CONCLUSIONS OF THE STUDY -

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*Centre for Educational Research and Innovation (CERI)*

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*- UNIVERSITE DE PARIS X - NANTERRE -*

# CURRICULUM REVISION

## A METHODOLOGICAL APPROACH

## - MAIN CONCLUSIONS OF THE STUDY -

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CONTENTS


Preface . . . . . 5

Unique Chapter

MAIN CONCLUSIONS OF THE STUDY . . . . . 9

Introduction . . . . . 9

Section I

OPINIONS EXPRESSED BY THE STUDENTS POPULATION . . . . . 9

1. Presentation . . . . . 9
2. Features in common . . . . . 10
3. Profile of the professional-type DES . . . . . 14

Annexes to Section I

TITLES AND CODES OF PROFESSIONS AND SUBJECTS . . . . . 20

Section II

SUMMARY OF OPINIONS EXPRESSED BY TEACHING STAFF . . . . 23

1. The relationship between the DES, the first degree and a professional career . . . . . 23
2. Assessment of the existing DES . . . . . 28
3. Requirements for the DES course . . . . . 32

Section III

AN EVALUATION OF EMPLOYERS' VIEWS ON THE DES . . . . . 37

1. Principal lessons drawn from current attitudes to the DES . . . . . 37
2. Qualitative conclusions on the ideal DES . . . . . 38
3. Quantitative conclusions on the ideal DES . . . . . 42

## PREFACE

In its unabridged French version the present report provides a review of the research done by a team of teachers from the Unit of Education and Research (UER) of the University of Paris X-Nanterre. This work was the result of co-operation between university teachers, students and representatives of industrial and commercial firms in the Paris area.(1) It was carried out at a period when the aims and organisation of higher education in economic science in French universities had become the target of much contradictory criticism and was designed to achieve three objectives:

i) a tentative analysis of the feelings and attitudes of each of the groups concerned (students, teachers and employers) with regard to the first degree in economics (licence ès-sciences économiques) and the higher degree (Diplôme d'études supérieures or DES).

ii) a survey of the attitude and preferences of the three groups with regard to any changes likely to be made in the DES in economic science of Paris X-Nanterre, so as to meet their requirements.

iii) The use of statistical and econometric analysis to permit a methodical confrontation of preferences and attitudes with a view to working out the "ideal" profile of a single DES designed to satisfy the needs of the three groups concerned or a range of alternative profiles likely to satisfy the preferences common to a number of "sub-groups" revealed by the analysis of the data collected.

The French version of this report(2) consists of five chapters setting forth the objectives and methodology of the research and lessons learned from surveys and interviews among students, teachers and employers.

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1) The methods proposed and results achieved by the team from the University of Paris X-Nanterre were adopted and amplified by the University of Paris I-Pantheon-Sorbonne, the University of Clermont Ferrand and the University of Lille (See Annexes A and B in the French version of this report).

2) The unabridged French version, entitled: "Rénovation d'un diplôme - Essai methodologique", is published at the same time as this booklet. It can be ordered from O.E.C.D. Sales Agents in the countries where they exist or from O.E.C.D. Publication Office, 2 rue André-Pascal, F75775, PARIS CEDEX 16 FRANCE.

As the field of application of the research was limited to four French universities, two of which are in the Paris area, and its object, i.e. the DES in Economic Science, was a specifically French degree it was considered desirable and adequate to translate only the final chapter of the French Report which sums up the main conclusions of the study.

To enable the English-speaking reader to make the maximum use of the following pages it should be remembered that the attitudes and preferences of students (who were working for a first-degree and/or a DES in economic science in 1970-1971), teachers, employers (industrial and commercial firms) and holders of a DES were investigated by means of interviews and in particular four questionnaires for the four groups concerned (students in their fourth year of study for the first degree, students preparing a DES teachers and employers.(1) The information collected represented a considerable volume of data which was subjected to single-variable and multi-variable classification and factor analysis with the help of a computer. The clusters on the resulting graphs show the infrastructure of the mass of survey data and reveal the main themes into which the questionnaire replies may be divided and which may be called the "factors". The main conclusions of the study with which this part of the report is concerned are largely drawn up from the factor analysis of the questionnaires completed by students and from the single- variable and multi-variable classification referred to above. In other words they are based on quantitative analysis associated with a number of more qualitative elements the nature of which we have felt it useful to mention, however briefly.

* * *

The Centre for Educational Research and Innovation (CERI) wishes to thank the research team from the University de Paris X, headed by Professor Guy Terny, and all the students and teachers of that University who so kindly cooperated in the interviews and completed the questionnaires distributed to them. [illegible] that University alone the persons interviewed voluntarily contributed over 700 hours for the purpose of this exercise. We also extend our grateful thanks to Professor René Rémond, President of the University de Paris X-Nanterre, who gave his support both to the CERI programme on institutional management in higher education and to the present research.

The funds required to finance the work on which the present report is based, were obtained:

1) These questionnaires, which are very comprehensive and undoubtedly useful from a methodological standpoint, will be published later in a separate volume of the present report.

- from a financial contribution to the project by the Société Shell-Française which also assisted the survey of industrial and commercial firms by promoting contacts and enabling the questionnaire intended for these firms to be tried out beforehand in its own departments.
- under a research agreement concluded with the Centre National de la Recherche Scientifique (CNRS, French Ministry of Education.)

Unique chapter

# MAIN CONCLUSIONS OF THE STUDY

## INTRODUCTION

The main conclusions of the study are set out in this chapter. Emphasis is given to defining an "ideal" DES (diploma of higher studies in economics) through a comparison of the opinions expressed by the three main groups concerned. These were:

- the student population, consisting of students in the fourth year of the first-degree course and of students already working for the DES,
- the teaching staff, comprising professors, "chargés de cours" and lecturers,
- employers who are represented, in the case in point, by private-sector firms located in the Paris area.

In a few cases - apart from minor shades of opinion - there was agreement among the three groups on some of the problems raised - although, even here, their motivations could usually be seen to differ. It was accordingly felt that no useful purpose would be served by attempting to present the results in summary form.

In the presentation as it stands - and this is also true of the actual procedure used in the study - representatives of each group speak in turn, and the more closely the subject concerns them, the more precise are their answers to the questions. While this procedure may make the results less easy to read, it also makes them more meaningful than an artificial summary would be.

## Section I
## OPINIONS EXPRESSED BY THE STUDENT POPULATION

### 1. Presentation

The results given below were derived from an analysis of the replies we have to all the questionnaires. In other words, we have analysed the opinions expressed by the students in the fourth year of the economics degree course at Paris University X - Nanterre.

This sample was composed of 115 students taking econometrics as a special subject, 131 specialising in business administration, 12 in public finance, 51 in international economic affairs, 11 who did not give their special subject and 87 students on the DES course. All these students were taking the courses given at Paris University X - Nanterre, in the 1970-1971 academic year. The analysis also included replies received from 46 students who were in the fourth year of the degree course at the University of Lille during the same period.

The analysis showed that the students envisaged two very different profiles for the type of DES they wanted: one a diploma for people going in for research and the other a diploma designed to provide an additional qualification. According to the interpretation of axis 1 (the axis of greatest inertia) in the factor analysis, the point of separation is situated between two roughly equal groups of students, although the DES students at Nanterre showed a preference for a research-oriented DES. The same form of analysis will be used for both groups.

As these two DES groups have features in common, the results will be presented in three parts:

- features the two groups have in common,
- the professional-type DES,
- the research-type DES.

In each of these parts, the following points will be examined in turn:

A. General considerations
B. Subjects selected (and related professions)
C. Teaching and testing methods
D. Relations between teachers and students
E. Extra-mural contacts
F. Information on the DES.

## 2. Features in common

### A) General considerations

#### 1. Admission to the DES course

Most of the students acknowledged that every graduate has the right to be accepted for the DES, their main specific argument being that the DES is the normal sequel to the first degree.

The general view was that admission to the DES ought not necessarily to be confined to graduates in economics, although a small number of students were apprehensive about accepting people whose theoretical grounding in economics was not adequate. However, they thought that only people with certain types of first degree or

diploma ought to be automatically accepted for the DES. These were as follows, in decreasing order of priority:

- graduates from schools for commercial studies
- graduates from engineering schools
- science graduates
- graduates in history, geography or sociology.

All other graduates or diploma-holders were rejected by the majority of the students.

In particular the students expressed the hope that this intake from areas outside the economics degree course would broaden the multi-disciplinary nature of the diploma.

When the students were asked whether unconditional eligibility for the diploma could be qualified by making some provision for testing non-graduates, the vast majority were not interested in the question, while others suggested that interviews or intelligence tests be introduced.

2. Interruption of studies before the DES

A large majority of students were of the opinion that economics graduates could not interrupt their studies before going on to the DES because there would otherwise be a break in continuity. However, those who thought that an interruption was possible considered that it should not be for more than one year.

3. Organisation of the DES

- Purpose

The essential end-product of the DES is a thesis.

- Group work

The students were asked a set of questions on group work. In spite of the fact that the questions were somewhat ambiguous, we can draw the following conclusions:

- group work ought to be left to the individual's discretion;
- the most suitable size for a group is fewer than five people;
- the students would like to see groups formed by affinities or, more specifically, by classified themes;
- working groups should be supervised by a director of research or by an assistant lecturer;
- each working group should compile a dossier or address itself to studying a given subject-area in greater depth and then present its findings at a seminar.

- Physical organisation

The supporting medium for the studies should include a library, photocopying facilities and data-processing equipment or, with equal preference, one of the following combinations: a library plus photocopying equipment; photocopying plus data-processing equipment; or

else a library plus data-processing equipment. Combinations including data-processing equipment were favoured less by fourth-year students than by DES students.

- Diplomas

The students expressed preference for a national diploma on completion of their studies rather than a diploma awarded by a university alone.

B) Subjects selected (and relevant professions)

- Foreign-language study should be compulsory at the DES level: 70 per cent of the students questioned were of this opinion and of these 85 per cent opted for English.

- Subjects taught in UERs(1) other than that of economics could be integrated into the DES curriculum. The two subjects proposed were sociology (25 per cent and 34 per cent) and psychology ( 9 per cent and 16 per cent), the figures in brackets being the respective percentages of fourth-year and DES students who asked for these subjects to be included. In each of the two types of DES described below, the subjects chosen are required for admission to three professions and hence it would be advisable to make provision for three special subjects in each of the two types, with a compulsory set of subjects in each speciality.

C) Teaching and testing methods

These methods may differ according to the subjects being taught.

Practical training:

In cases where practical training forms an integral part of the DES curriculum there was no marked difference of opinion as to whether there should be one or two periods of training. The most commonly recommended length of training was two months. One or more periods of practical training should be organised during the course of study for the DES. The work performed should be remunerated on the basis of about 1,000 francs a month and should be organised by the university rather than be arranged by the teachers or the students themselves. Practical training should normally take place in France. It should be sanctioned by a report on completion of the training period which should be taken into account when the diploma is awarded. (It seems advisable to make a distinction between end-of-training reports and dissertations sanctioning other teaching methods).

Length of the course of study for the DES

The length of the course of study should be about ten months, although the possibility of studying for the diploma in two

1) Translator's note: "UER = unité d'enseignement et de recherche" (unit of education and research), which has replaced the traditional university faculty in France since 1968.

periods should be allowed. About thirty-two hours' work a week should be required.

Working groups

Working groups should be set up principally to compile dossiers and to establish joint research projects.

Timetables

The timetable should be spread over the entire working week, apart from Saturdays. Lectures and seminars should be held in the late afternoon or evening.

D) Relations between teaching staff and students

The students stated that they wanted to have meetings with their teachers during the DES course. Different intervals for such meetings were suggested, depending on the type of DES, but it was felt that they should last from 10 to 30 minutes on each occasion.

The students wanted to have the possibility of giving an assessment of their teachers, particularly with regard to their teaching methods and the way they organise their work. The main purpose of such assessments would be to improve relations between teaching staff and students.

E) Extra-mural contacts

Although the students largely overlooked this paragraph, those who did not reply were of the opinion that part of the teaching programme ought to be entrusted to people from outside the university, with the main aim of providing them with more practical knowledge from outside sources and of improving relations between the university and the 'rest of the economy'. The idea of inviting foreign teachers to lecture was welcomed chiefly because their training was expected to be different from that of French teachers.

F) Information

Information on job opportunities for DES-holders

While the students thought that business and industry should keep them informed of job opportunities for DES-holders, they did not expand on this statement. They did not specify how the information should be conveyed to them. In any event, the students did not appear to be unduly worried about job openings, judging from the large number who failed to reply to the question on this subject.

Information of the DES

The students felt that they were not properly informed about the studies required for the DES. They would like more information on teaching methods rather than on testing procedures or the names of the teachers and so on, as well as on syllabuses rather than on knowing what the research programmes proposed.

They thought that this information should be readily available to them in brochures distributed within the university rather than on a regional or national basis. These brochures should be made available from 3 to 12 months before registrations for the DES are accepted.

3. Profile of the professional-type DES

A) General considerations

1. Admission to the DES course

Those students who did not share the view that admission to the DES course was an established right for all graduates believed that the first degree is not selective enough. This opinion was stated regardless of the replies they gave elsewhere in the questionnaire.

2. Organisation of the DES

- Purpose

The students wanted to obtain a DES in the hope of earning a higher salary.

- Work during the DES course

The students were of the opinion that the DES course should be spread over 6, 9 or 10 months. The somewhat imprecise nature of this reply was further borne out by the proposals for the working week, which ranged from 0 to 52 hours! The number of working hours increased slightly in cases where the students clearly indicated that they want the DES course to culminate in a thesis. Classes should be on Tuesdays, Wednesdays and Thursdays, either in the morning or in the late afternoon.

B) Subjects selected (and relevant professions)

Professions open to students taking the type of course provided:

P1: Management (no other details given)

P2: Business administration, marketing, advertising

P3: Financial administration (business)

P8: Banking, insurance, financial analysis, accountancy

One special case was quoted:

P4: General administration, personnel administration, public relations counselling.

Subjects

As the subjects differ with the professions chosen, it would be advisable to make provision for three special subjects associated with each profession, plus a fourth special subject combining the two types of DES and leading to profession P4. The compulsory and optional subjects for each of these specialities are given below:

C) Teaching and testing methods

Preliminary comment on the first degree

The students were of the opinion that, before starting on a DES course directed towards providing "professional qualifications", first-degree courses they attend should be less theoretical, that special

subjects should be more "specialised" and be given a greater weighting and that practical training should be arranged during the first-degree course.

Table 1

THE PROFESSIONAL-TYPE DES(1)

| | Compulsory subjects defining the special subject area | Common core of optional subjects |
|---|---|---|
| P1 | AF2, TC3, AF3 | TJ2<br>AF1 |
| P2 | AF2, TC1, TC3 | EC3<br>TJ1 |
| P3 | TJ1, TJ2, EC2 | TC1<br>AF3<br>TC3 |
| P8 | EC3, TJ1, TJ2 | AF2<br>EC2<br>M16 |
| P4 | TC2, TM2, MI3 | TM1, TM3, TM4, M14, MO7, EC6 |

1. Outside training

About 60 per cent of the students asked for outside training to be included in the DES course and that such training be provided in private firms.

2. The case study method

This method of teaching was advocated by a good number of students, although a distinction was made as to the subjects to which it could be applied (accountancy, business finance and accounts, commercial and business law, budget control, advertising and sales promotion).

3. Teaching by people from outside the University

A substantial amount of the teaching should be entrusted to people from outside the University and, in particular, to professional experts.

Table 2

THE PROFESSIONAL-TYPE DES

| Teaching methods | Associated testing methods | Coefficient |
|---|---|---|
| Lectures by professional experts (158/680) | Reports and written work | $\frac{21}{6.80} \# 2$ |
| Case study method (144/680) | Continuous proficiency check (17/144) | $\frac{17}{6.80} \# 1.5$ |
| Work on dossiers (138/680) | Dissertation (40/138) | $\frac{40}{6.80} \# 4$ |
| Lectures given by teaching staff (93/680) | Written examination (25/93) | $\frac{25}{6.80} \# 2.5$ |

1) A complete list of subjects and their contents is given at the end of this section.

D) Relations between teaching staff and students

The students wanted to have from two to five interviews a month with their teachers, each lasting from 10 to 30 minutes, as already noted in the section on features in common. These students thought that relations should be similar to those prevailing between first-degree students and their teachers.

E) Extra-mural contacts

See the section on features in common (Section I, § 2).

F) Information

See the section on features in common (Section I, § 2).

4. Profile of the research-type DES

A) General considerations

1. Admission to the DES course

Those students who did not share the view that admission to the DES course was an established right for all graduates thought that the purpose of the first degree was not to prepare for the DES. This opinion was stated regardless of the replies they gave elsewhere in the questionnaire.

2. Organisation of the DES

- Purpose

The students wanted to gain admission to the DES course in the hope, in particular, of deriving intellectual satisfaction from it.

- Work during the DES course

The DES course should be spread over nine or ten months or sometimes even longer and students should be expected to do an average of 25 hours actual work a week. The number of working hours rose slightly in cases where the students clearly indicated that they wanted the DES course to culminate in a thesis.

Classes should be preferably on Tuesdays, Wednesdays and Thursdays, either in the morning or in the late afternoon. These are the wishes of the students who are already on the DES course and are therefore research-oriented, as we have already mentioned.

B) Subjects selected (and related professions)

Professions open to students taking the type of course provided:

P5: Economics and statistics

P6: Teaching, para-teaching professions, pure and applied economic research

P7: Economic analysis in government departments and international organisations

Subjects: As the subjects differ with the professions chosen, it would be advisable to make provision for three special subjects associated with each profession. The compulsory and optional subjects for each of these specialities are given below (Table 43).

Table 3

THE RESEARCH-TYPE DES[1]

| Professions | Compulsory Subjects | Common core of optional subjects |
|---|---|---|
| P5 | MO3, TM5, TM4 | TM1<br>TM3<br>TM4<br>MO1<br>MO5 |
| P6 | TM5, TM1, TM3 (M11) | M15<br>TM5<br>M12<br>MO3 |
| P7 | M12, EC1, M13 (M10 or M12) | MI1<br>EC1<br>MO8<br>M12<br>M10<br>M13<br>MO9<br>MO4<br>M11<br>EC5 |

C) Teaching and testing methods

Preliminary comment on the first degree

On the whole, the students did not challenge some of the features of the first degree. In their opinion, the course should still be to some extent theoretical, the special subjects were adequately "specialised" and weighted and there was no need for practical training during the first-degree studies.

1. External training

A very large number (75 per cent) of the students in favour of a research-oriented DES did not want practical training to be included in the DES course. However, others were of the opinion that if some practical training is possible, it should be in government departments or international organisations.

2. The case-study method

None of the students advocated this method.

3. Teaching by people from outside the University

Although the idea of people from outside the University taking part in teaching was not completely excluded, the consensus seemed to be that the University teaching staff should be responsible for most of the courses.

D) Relations between teaching staff and students

These students wished to have monthly interviews lasting from some 10 to 30 minutes, as stated in the section on features in common. They also wanted relations with the teaching staff to be different from those that prevailed during the first-degree course.

1) A complete list of professions and subjects, identified above only by their code number, is given at the end of this section.

Table 4

THE RESEARCH-TYPE DES

| Teaching methods | Associated testing methods | coefficient |
|---|---|---|
| Lectures by teachers on their field (118/469) | Oral examination (21/118) | 21/469 # 2.5 |
| Verbal reports by students on their research (114/469) | Dissertation (45/114) | 45/469 # 5 |
| Lectures by specialists | Continuous proficiency check (8/82) | 8/469 # 1 |
| Work on dossiers (81/469) | Reports and written work | 11/469 # 1.5 |

E) Extra-mural contacts

Although many students overlooked this paragraph, there were some who were hostile to the idea of entrusting teaching to people from outside the University. The same people also criticised, in general terms, the teaching of first degree courses and were of the opinion that specialised knowledge could be acquired by professional training after the DES.

F) Information

See the section on features in common (Section I, Para. 2).

Table 5

TEACHING METHODS FOR THE RESEARCH-TYPE AND PROFESSIONAL-TYPE DES

(Summary of the preferences expressed by all fourth-year and DES students)

| | Teaching system | Students mentioning the following proficiency testing methods | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Number of students mentioning the system | Written examination | Oral examination | Continuous check | Report and written work | Dissertations | Presentation of papers | No check | Others | Did not reply |
| | Number | Number | Number | Number | Number | Number | Number | Number | Number | Number |
| Professional-Type | | | | | | | | | | |
| Lectures by teaching staff * | 93 | 25 | 16 | 10 | 3 | 15 | 0 | 2 | 2 | 20 |
| Lectures by students | 31 | 0 | 2 | 6 | 3 | 5 | 5 | 1 | 1 | 8 |
| Discussion groups after preparatory readings | 86 | 7 | 9 | 9 | 6 | 16 | 4 | 3 | 2 | 30 |
| Case-study method ** | 144 | 12 | 17 | 17 | 25 | 22 | 1 | 3 | 4 | 43 |
| Papers presented by professional experts *** | 158 | 12 | 17 | 12 | 21 | 30 | 4 | 6 | 2 | 54 |
| Work on dossiers ** | 138 | 2 | 2 | 16 | 18 | 40 | 2 | 2 | 4 | 48 |
| Other types | 30 | 1 | 0 | 3 | 11 | 4 | 3 | 0 | 3 | 5 |
| TOTAL | 680 | 59 | 67 | 73 | 87 | 132 | 19 | 17 | 18 | 208 |
| Research-Type | | | | | | | | | | |
| Papers presented by teachers on their work *** | 118 | 15 | 21 | 7 | 5 | 11 | 0 | 9 | 7 | 43 |
| Papers by students on their reading | 63 | 3 | 11 | 10 | 3 | 13 | 1 | 2 | 2 | 18 |
| Papers by students on their research *** | 114 | 3 | 7 | 7 | 5 | 45 | 3 | 4 | 5 | 35 |
| Papers by experts ** | 82 | 4 | 10 | 8 | 7 | 7 | 1 | 6 | 2 | 37 |
| Work on dossiers ** | 81 | 4 | 9 | 6 | 11 | 20 | 1 | 1 | 4 | 25 |
| Other types | 11 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 2 | 5 |
| TOTAL | 469 | 29 | 58 | 38 | 33 | 97 | 6 | 23 | 22 | 163 |

N.B. The number of asterisks indicates the importance the students attached to the particular teaching system.

Annexes to Section I

## TITLES AND CODES OF PROFESSIONS AND SUBJECTS

### A) PROFESSIONS: LISTS AND CODES

P1 MANAGEMENT
P2 BUSINESS ADMINISTRATION, MARKETING, ADVERTISING, PUBLIC RELATIONS
P3 FINANCIAL ADMINISTRATION (BUSINESS)
P4 GENERAL ADMINISTRATION, PERSONNEL ADMINISTRATION, PUBLIC RELATIONS COUNSELLING
P5 ECONOMICS AND STATISTICS
P6 TEACHING AND PARA-TEACHING PROFESSIONS
P7 ECONOMIC ANALYSIS IN GOVERNMENT DEPARTMENTS AND INTERNATIONAL ORGANISATIONS
P8 BANKING, INSURANCE, FINANCIAL ANALYSIS, ACCOUNTANCY
P9 RESEARCH IN PURE AND APPLIED ECONOMICS

### B) SUBJECTS: LISTS AND CODES

1. General subject code

| | |
|---|---|
| Micro-economic techniques | MI |
| Macro-economic techniques | M |
| Economic theory | EC |
| Mathematical and Statistical Techniques | TM |
| Financial Analysis | AF |
| Business techniques | TC |
| Legal techniques | TJ |

2. List, titles and detailed codes of DES Subjects

| Nos. | Codes | Subject titles |
|---|---|---|
| 1. | MI1 | Micro-economics |
| 2. | MO1 | Growth analysis |
| 3. | MI2 | Input-output analysis and business analysis |
| 4. | MO2 | Demography and population analysis |
| 5. | MO3 | Macro-forecasting methods |
| 6. | MO4 | The economy of France |
| 7. | MO5 | The economies of the Common Market countries |

| Nos. | Codes | Subject titles |
|---|---|---|
| 8. | M06 | The economics of other countries (capitalist and socialist) |
| 9. | M07 | Economic policy |
| 10. | EC1 | Public-sector economics |
| 11. | M08 | Space economics |
| 12. | M09 | Economies of the developing countries |
| 13. | EC2 | Theory and policy of the distribution and re-distribution of income and wealth |
| 14. | M10 | Planning in socialist and capitalist countries |
| 15. | M11 | Economics of different sectors of the economy (agriculture, energy) |
| 16. | M12 | Public-sector economic analysis |
| 17. | M13 | Private-sector economic analysis |
| 18. | M13 | Economic development of various countries |
| 19. | EC3 | Monetary theory and policy |
| 20. | EC4 | Theory of international trade and forecasting methods |
| 21. | M14 | Economic policies in international trade |
| 22. | M15 | Monetary systems and the financing of international trade |
| 23. | TM1 | Probability, processes, data |
| 24. | TM2 | Theoretical and applied statistics |
| 25. | TM3 | Probability models and operational research |
| 26. | TM4 | Programming models, graphs, games theory |
| 27. | TM5 | Mathematics in economics (equilibrium, growth) |
| 28. | AF1 | Accounting |

| Nos | Codes | Subject titles |
|---|---|---|
| 29. | TJ1 | Commercial and business law |
| 30. | M16 | Capital markets and the financing of the economy |
| 31. | EC5 | Economic history |
| 32. | EC6 | Marxist theory, economics of sociology and the history of economic thought |
| 33. | AF2 | Budget control |
| 34. | AF3 | Finance, business accounting |
| 35. | TC1 | Advertising, marketing and sales promotion |
| 36. | TC2 | Public relations |
| 37. | TC3 | Economics of distribution |
| 38. | TJ2 | Tax law |

## Section II

### SUMMARY OF OPINIONS EXPRESSED BY TEACHING STAFF

1. The relationship between the DES, the first degree and a professional career

   A) Ought there to be selective admission to the DES after the first degree?

The teaching staff at Nanterre was divided on this question. Fourteen teachers throught that there ought to be some process of selection because, in their opinion, the present first degree was not selective enought. On the other hand, thirteen teachers thought that there was no need for selective admission.

Four teachers expressed a midway opinion in that they felt that the present first degree was not an adequate prerequisite for admission to the DES because its purpose is not to prepare for the diploma course. The degree offered general training in economics, whereas the DES was primarily geared to research. There was a break in continuity between the two, at least with the first degree in its present state.

From this common starting point, however, they drew different conclusions as to the ways and means of proceeding from the first degree to the DES. One respondent did not offer any suggestion and was accordingly added to the group of thirteen teachers who regard the first degree as an adequate entrance requirement.

From the standpoint of the midway group, the fourth year of the degree course, when the special subject chosen in the third year is already being studied in greater depth, would appear to be the best time for effecting the transition to the DES because students wishing to go in for research would have an opportunity of showing their bent while the others could terminate their studies at the degree stage.

Two of the other teachers in the midway group did, in fact, make suggestions for offering guidance to students just before the DES, but their purpose in doing so was not so much to advocate selection as to enable the students themselves to find out whether they were sufficiently motivated to do the research involved in the DES course.

In the justifications they gave for the need to offer students guidance, the two last-mentioned teachers shared the motivations of the fourteen teachers who wanted admission to the DES to be by selection.

The type of guidance this group recommended essentially comprised a preliminary dissertation and an interview before a panel. Several respondents mentioned the need for students to acquire prior professional experience from a period of practice training, while 60 per cent of those replying suggested a combination of several criteria.

Among the thirteen teachers who were not in favour of selective admission to the DES course, only three were opposed to any form of selection at all. The others ten cited the fact that the DES was the normal sequel to the first degree, which might imply that the first-degree examinations were considered sufficiently selective in themselves. It is noteworthy that none of the respondents considered that the DES should be a fifth year of the degree and they all regarded the diploma as an introduction to research in economics. It can be assumed, therefore, that these teachers see the DES as a specific stage of study differing from the first degree, but which all students gaining a first degree are entitled to attempt.

B) Admission to the DES course of people holding degrees in subjects other than economics

This suggestion was rejected by 35 per cent of the teaching staff. In their opinion, a sound general background in economics is essential for admission to the DES course. Such a grounding is not easy to obtain even from the present first degree in economics and would therefore be all the more difficult to acquire from other degrees that are not directly related to the subject. They were of the opinion that if people holding other degrees were to gain direct admission to the DES course, the existing wide range of economic backgrounds would be further increased and teachers would have to spend even more time than at present going over the basic concepts that are necessary before any in-depth study is possible. Hence, they were only in favour of equivalences that are on a par with the second stage of the degree.

Teachers who were in favour of wider admission to the DES (62 per cent) gave reasons similar to those in the students' answers to the same question and with roughly similar percentages. The reason most commonly cited was that the multi-disciplinary approach, which is desirable at the level in question, would be broadened if the DES were opened to graduates in other fields. Although the latter might often have a less sound economic training, their application would bear witness to the stimulating nature of their motivations. In the areas of research conducted by seminar, the complementary nature of their own educational background and that of the economics degree course would make for deeper insights than would be possible if the students were all to have the same background.

What types of degree or diploma should be required for direct admission to the DES course?

Of the preferences expressed by the teaching staff, science degrees came at the top of the list (with 25 choices), followed by the human sciences (history and geography, and sociology, with 22 choices). Then came graduate engineers from the "grandes écoles" (14 choices), graduates from schools for commercial studies (11 choices) and finally graduates of the Institute of Political Sciences and Law (7 choices), although no specific reference was made to them in the questionnaire. Last of all, seven choices went to arts degrees (classics or modern).

These preferences are remarkably different from those expressed by the students, who placed schools for commercial studies at the top of the list, followed by engineering schools, with science degrees coming last.

The same differences of opinion between studentssand teachers are to be found in their answers to the question on the prior examination of the knowledge of economics displayed by other graduates before being admitted to the DES course. While 22 per cent of the fourth-year students were against such an examination, only one teacher out of twenty-two was opposed to it.

Various methods were proposed for conducting the examination. None of the teachers chose the preliminary dissertation because it was considered too cumbersome. The most commonly chosen method (with five choices) was the oral interview. This was followed by tests of knowledge and intelligence (with four choices). The order of preference was the same as that proposed by the students.

C) The relationship between the teaching of economics and a professional career

At the first-degree level

Only four out of thirty-one teachers considered that the degree course was specialised enough in a given area of economics to be used for a professional career. However, this does not mean that the other twenty-seven teachers suggested that the professional specialisation of the first degree be increased. Thirteen of them were of the opinion that the first degree had a different purpose.

The thirteen teachers who thought that inadequate specialisation was due to lack of co-ordination and planning in degree courses were not in favour of introducing additional special subjects but were of the opinion that the existing organisation of the degree courses did not enable the most to be made of existing specialities.

Only four out of thirty-one teachers thought that the degree course should give greater emphasis to subjects that would be of direct value in a professional career.

That is why only nine teachers considered that the requisite specialisation could be provided in the degree course by means of other teaching methods along the lines of those used in the "grandes écoles" and IUT (university institutes of technology).

In addition to the eleven teachers who were of the opposite opinion, the eleven who did not reply to the question were also hostile to the idea but avoided the issue because they had already stated that, in their view, the degree course was already sufficiently specialised.

In short, only a small minority of teachers want the degree course to use teaching methods that are designed to provide students with a professional specialisation. In fact, this is the same minority as wanted an increase in the subjects that would be of direct value in a professional career (4 out of 31).

The relationship between the DES course and a professional career

There were various approaches to the question of this relationship but, in every case, the idea of a close link existing between the two was rejected by a large majority of teachers.

We have already seen that, out of thirty-one teachers, only three wanted the DES primarily to provide specialised professional training compared with the existing degree, while three others wanted the course, above all, to provide general professional training.

Only five teachers out of thirty-one (about one-sixth) replied in the affirmative to the direct question. In the opinion of the others the DES course should be geared to research (17 choices) and to acquiring know-how rather than "knowledge" (15 choices). Professional training, in their view, could and should only be acquired in a career (10 choices).

The teachers were asked whether they could give specific examples of professions and activities to which the DES could lead and to state what subjects would be relevant to them.

Nearly half the teachers refused to reply to the first part of the question. Two others refused to indicate what seminars would be relevant to the professional careers.

Out of the twenty-two teachers who were opposed to a close link being established between a professional career and the DES syllabus, five of them asserted that the seminars cover so wide a theoretical field that it is impossible to speak of a close link between the seminars and the relevant professional careers.

The professions or activities mentioned most frequently were in business and industry. All branches of firms were mentioned including, in order of decreasing frequency, economic surveys (mentioned 13 times) finance departments (8), management (4), marketing (3), statistics and econometrics (3), short-term forecasting (2), accounting (2), sales (2), banking departments (2), etc.

The number of times a given seminar is relevant to a particular professional career can be related to the three professions mentioned most often, as follows:

a) Business economist (economic surveys)

The thirteen teachers mentioning this profession related it to thirty-three different seminars, the most frequently cited being:

- advanced micro-economics (mentioned six times)
- economic analysis applied to private-sector decision-making (6 times)
- optimisation control: applications to economic growth and business models (5 times)
- advanced macro-economics (4 times)

b) Finance departments

The eight teachers mentioning this activity related it to twenty-one different seminars, the most frequently cited being:

- advanced micro-economics (mentioned 3 times)
- mathematical methods applied to financial decision-making (3 times)
- methodology of financial decision-making in business (3 times)
- financing plans and policies (3 times)
- capital markets (3 times)

c) Management

The four teachers mentioning this activity related it to twenty seminars, the most frequently cited being:

- advanced micro-economics (mentioned twice)
- economic analysis applied to private-sector decision-making (twice)
- statistical methods in econometrics (twice)
- analytical accounting (twice)
- economics of product distribution (twice).

d) Practical training

In the opinion of 42 per cent of the teachers, practical training should not form part of the DES course. For some of the respondents this was because the DES must necessarily be geared to research, while others considered that practical training was not feasible within the existing one-year DES course.

On the other hand, half the teachers considered that the DES course should include practical training.

The majority was in favour of a single training period lasting from two to three months during the DES course. No preference was stated for public or private business undertakings or for government departments, or for any particular location in France or abroad.

The teachers were almost equally divided as to whether the results of the practical training should count towards the actual diploma awarded.

Those replying in the affirmative were of the opinion that the link should be established through a training report (mentioned 11 times).

Virtually all the teachers thought that practical training ought to be remunerated, the average amount mentioned being some 1,120 francs a month.

No majority emerged in the answers to the question as to who ought to be responsible for finding training opportunities and organising training. The question ought perhaps to have been put less bluntly, as some respondents thought that the student concerned or a professor ought to find a training opportunity and that the university should be in charge of organisation.

2. Assessment of the existing DES

A) Seminars

Half the teaching staff considered that there were sufficient seminars, but one out of every five teachers thought that there were too many.

Only 30 per cent of the teachers considered that the seminars covered an adequate range of subjects, while 23 per cent thought the range was insufficient. Some of the latter were in favour of more management or econometrics seminars and others wanted the introduction of seminars on distribution theory, the economics of labour etc.

Those teachers (20 per cent) who found the range of seminars too wide regretted the fact that there were no clearly defined cores round which the existing seminars could be fitted together or others could be created; seminars which did not fit into the pattern could then be discontinued, especially if fewer than ten students registered for them.

Only two teachers (who were not lecturing for the DES cours) thought that the four seminars which students are currently required to attend in order to obtain the DES were too few and wanted them increased to six.

Half the teachers were of the opinion that the number of seminars was sufficient, while 30 per cent considered that the number was too high and that three seminars would be sufficient (the training seminar, the main-subject research seminar and one research seminar on a subsidiary subject), having regard to the fact that most of the students work for their living, often in full-time employment.

In the opinion of most of the 25 teachers who felt able to attempt a definition, the training seminar ought to consist of an in-depth analysis of one of the fundamental areas of economic theory with a general review of the relevant research and publications.

The 27 teachers who attempted to define the research seminar suggested that its scope should be narrower than that of the training seminar and that its formative character should essentially lie in the research done by the students, in the working methods involved and in the effort at drafting required. Teachers themselves should do some research in the relevant field, with student participation. In short, the seminar should offer an apprenticeship in group working.

The teachers were asked their opinion on the existing training and research seminars.

a) They were almost equally divided on the question as to whether the existing distinction between the training and research seminars was satisfactory in practical terms.

Even those who thought the distinction was satisfactory expressed reservations at times or else made a clearcut distinction often without managing to explain in what respects they found the current practice satisfactory, while others thought that the distinction was not clear enough.

b) 52 per cent of the respondents considered that the distinction between main and subsidiary research seminars was not satisfactory. In their opinion, all research seminars should be composed of students working on their "main" subjects. Seminars were overcrowded with students taking their "subsidiary" subjects; testing of the knowledge acquired was arbitrary and, as a result, marking was less strict. Research seminars were turned into pseudo training seminars because students had no alternative but to attend the lectures they were offered.

Teachers who considered that the distinction was satisfactory above all had a clear picture of the specific nature of the main seminar, in that students were required to produce a dissertation. Students could not be expected to produce several well-prepared dissertations all at the same time and yet the DES course had to consist of more than two seminars. With the subsidiary seminar, students could either go more thoroughly into a particular area of their dissertation subject or else become familiar with a quite

different subject area. They could benefit from the work done by their fellow-students attending seminars on their main subject and could build up a useful background on the subject.

c) The answers to the question as to what length of time students should actually spend on the DES each week work out to an average of 24 hours. However, if we disregard the two answers suggesting 40 and 60 hours, which were presumably meant to refer to the ideal length of time, the average drops to 20 hours a week. This would tend to bear out the impression that DES teachers have difficulty in getting to know many of their students. This impression was already gained in cases where students chose their "subsidiary" seminar subject often without having any idea of what they were going to do with it.

d) This same difficulty in getting to know the DES students and establishing stable working relations with them is also probably the reason for the replies given to the question as to whether it was essential for students to attend virtually all seminar sessions. Although DES teachers know that this is often not the case, 10 per cent of them replied in the affirmative. The fact is that, at the beginning of the academic year, a large number of students "go the rounds" and sit in on several research seminars before making a choice, so that teachers have to lay the basis for organising their classes with a continually fluctuating audience which may change from one class to the next.

This situation, which can be very disquieting for teachers, may go on for quite a long time in the year before they are really in a position to state how many students are attending their seminar as a "subsidiary" subject. Their desire to see a change in this state of affairs probably accounts for the reply most of them gave to this question.

The teachers were asked for their opinion on the working and and testing methods in organisation of the seminars.

a) More than three-quarters of the teachers considered that the students' previous education did not prepare them for the working methods required for the DES course. In their opinion, the students were too passive and waited for the teacher to do everything instead of taking the initiative and discussing matters among themselves. They did not know how to work, did not have the ability to produce a synthesis of their ideas and often had serious gaps in their theoretical knowledge. Their thinking was often pedestrian and they did not display sufficient intellectual curiosity.

b) Virtually all the teachers considered that the dissertation was a formative tool and some were of the opinion that more use ought to be made of it as a working method at the first-degree level. In their view, students are compelled to take some interest in the field

from which they take a dissertation subject and this is an added incentive. In addition, they have to do some research into documents on thir own initiative and drafting forces them to clarify their ideas.

c) This is why most of the teachers considered that the working methods for the main research seminar were satisfactory.

By contrast, opinions were exactly divided on the question as to whether the working methods for subsidiary research seminars were acceptable. Those who thought they were unsatisfactory criticised the lack of facilities or the lack of interest shown by the students, who attend seminars as if they were sightseers.

Out of the twelve teachers who felt able to reply to the question on working methods in the training seminars, eight thought they were unsatisfactory. Their criticisms stemmed mainly from the fact that far too many students are involved and facilities are poor.

B) On the other hand, the teachers felt that the manner of testing the knowledge acquired from the DES course was, on the whole, more satisfactory than the working methods.

Here again, a higher proportion of teachers stated that they were satisfied with the arrangements for the main research seminars, on account of the dissertation, which represents both a method of working and a satisfactory means of testing students. It can be assumed that both teachers and students find the dissertation approach satisfactory because it offers a combination of a working method and a form of testing. The value of the dissertation lies not so much in the straight testing of "knowledge" as in showing whether students have an aptitude for logical reasoning, for stringing ideas together and for using their knowledge for exposition purposes. From that standpoint, it is in line with the preference which the teachers showed for types of proficiency testing that are chosen primarily for the usefulness of the type of work students have to do to prepare for tests and which, in the first instance, make it possible to assess their ability to formulate a question properly.

A much smaller majority of teachers (9 to 7) considered that testing methods for the subsidiary research seminar were satisfactory. Most of the teachers who were not satisfied with the method generally criticised the superficial nature of the work, which meant that testing could only be arbitrary.

The percentage of teachers satisfied with the testing methods used in the training seminar (66 per cent) is the exact opposite of those satisfied with working methods in the same seminar.

Teachers who expressed dissatisfaction complained of the excessive number of students, which meant that only conventional testing methods could be used.

Some teachers stated that they were satisfied since no proposals had been made for reforming the system. Others seemed content with testing the students by requiring them to present one or two papers orally and to sit a final written examination.

The teachers were divided into two "camps" over the relative weighting of the tests for the different seminars.

Some considered the weighting satisfactory for want of a better system or because they felt that any change might make the situation worse.

The vast majority of the teachers who were not satisfied with the existing weighting system called for upgrading of the main seminar. They also took the opportunity of recalling that they would like to see one of the two subsidiary seminars discontinued. This, in their view would solve the problem.

C) Miscellaneous questions

Three-quarters of the teachers were satisfied with the present length of the DES and none found it too long. Those who thought it was too short wanted courses to begin earlier in the academic year.

More than two-thirds of the teachers were of the opinion that a foreign language (principally English) should be a compulsory subject for the DES.

The teachers considered that the subjects not strictly related to economics which DES students would be advised to follow were sociology (mentioned 20 times), law (12 times), psychology, languages and mathematics and statistics (9 times), geography and history (8 times) and philosophy (7 times).

In making a general assessment of the students attending their seminars, the teachers most frequently drew attention to the contrast often found between a handful of brilliant students and the passive majority which had difficulty in communicating.

3.- Requirements for the DES course

A) General orientation

1. The general aims of the DES, as they emerge from the preferences expressed by the teachers are as follows, in their order of preference:

- to be trained in methodical thinking and research,
- to acquire an advanced knowledge of economics,
- to assimilate a higher level of technical knowledge than that for the first degree,
- to provide general professional training,
- to provide specialised technical training.

The main ideas on organisation and teaching emerging from the replies given by the thirty-one teachers are as follows:

- A high degree of flexibility is required, so that teachers are not all bound by the same rigid framework?
- Within its general context, the subject chosen each year for the research seminar should be defined precisely enough to allow for collective research by the seminar students working in small groups, rather than lead to scattered individual research projects.
- The research seminar should, as far as possible, be open to other teachers, people from outside the university and students working on doctorate theses. This approach should also make it possible to establish contact with the professional world.
- The methods of approach observed in the different seminars should be closely compared and criticised.
- Students should be able to have frequent meetings with their director of studies outside the seminars proper.

Practical considerations

According to the replies given by 28 teachers, the average number of students in each research seminar should be 15 or 16.

With a smaller number, the work done between one seminar session and the next may not be enough to occupy the entire session, while above that number students may not have an opportunity of expressing themselves sufficiently to enable teachers to follow up the progress of everybody's research.

- The timetables proposed by the 22 teachers who expressed a preference were Tuesdays and Wednesdays in the later afternoon (5.00 p.m. to 8.00 p.m.) or in mid-afternoon (2.00 p.m. to 5.00 p.m.).

B) Relations with students

All the teachers obviously consider that relations with the students are important, although the conclusions to be drawn from their replies cannot be said to be original.

More than two-thirds of the teachers would like their relations with the students to be quite different from those prevailing on the first-degree course. They should be less formal and less like those between master and pupil.

Those teachers who did not feel that relations needed to be very different considered that satisfactory relationships already prevailed in their classes. This is quite possible in the case of second-cycle special subject classes, where there are very few students.

Apart from the seminar sessions, the teachers would like to meet their students for 10 to 30 minutes, on average two or three times a month. Judging from the average for the 21 answers given, a single

teacher ought to be able to hold meetings with 13 or 14 students. This is only very slightly lower than the figure for the number of students teachers would like to have in their seminars. On the whole, therefore, the answers to these two questions are compatible.

Teachers would like these teacher-student meetings to lead to personal relationships established on an equal footing in which the problems of students' dissertations or papers can be discussed.

C) Working groups

In the opinion of 80 per cent of the teachers questioned, group work was a method which ought to be left to the discretion of the individual.

The six teachers who wanted to impose group work argued that it was essential both for working out theoretical problems and as an apprenticeship for professional careers.

The teachers considered that group work provided an environment in which students learned to compare and criticise opinions. They valued it more for its character-building qualities than for the short-term results it could be expected to provide. The students for their part, considered that various aspects of their work, such as papers, dossiers and dissertations, could be prepared in groups but that group work was mainly advantageous in the case of assignments requiring a great deal of preparation.

In the opinion of more than half the teachers, the teacher's role in relation to the students' group working cannot be a wholly external one. The teacher can take part in some of the stages of the work if the students ask him to do so.

According to the average for the replies given by the teachers, the most suitable size for a working group would be 4 or 5 students.

The vast majority of the teachers considered that the groups ought to be set up by the students themselves and supervised by assistant lecturers preparing theses on the subject or by the teacher himself.

D) Testing methods

Three-quarters of the teachers were of the opinion that they alone alone are in a position to test the students, because it is their job, because they are the only people with the necessary experience and because it is the only means of ensuring that diplomas are awarded with impartiality.

The nine teachers who did not think that they were the only people capable of awarding diplomas suggested that it might be possible to set up mixed examining boards, with the participation of students (to assess group work for instance) or professionals.

Students ought to be tested for the following abilities, in order of decreasing importance:

- their ability to formulate a question properly,

- their ability to conduct a precise and reasoned argument,
- their ability to situate a problem in a broader context,
- their proper understanding of the concepts fundamental to the subject matters.
- their ability to assimilate knowledge from within a programme.

The different types of testing should be chosen both for their value as tests in themselves and for the usefulness of the type of work required to prepare for them. However, if a choice is possible, preference should be given to the second consideration.

In the opinion of three-quarters of the teachers, the type of testing should evolve as the course progresses and may differ considerably from subject to subject.

Even so, two-thirds of the teachers wanted the DES to be a national diploma. This does not seem to imply that the conditions required to bring about this situation would result in the standardization of teaching and testing methods.

Opinions were very divided on the question as to who should decide what form testing should take at the DES level.

Although none of the teachers wanted the decision to be left to the student body and only two teachers wanted the teacher alone to take the decision, the answers were about equally divided, as follows:

- the teacher after consulting the students (9 votes)
- the teacher and students together (9 votes)
- the UER Council (10 votes)
- a board composed of teachers (10 votes)

It should be noted that 18 teachers wanted the students to be consulted directly at least once as compared with 22 who did not and that 10 teachers out of 31 considered that, at the DES level, testing procedures were a matter for the UER Council.

In answer to the question as to how the nature and number of DES seminars should be decided, the teachers suggested that the research they had completed or were working on should be taken as a basis for submitting proposals - either to a select committee in the opion of some of them, or to an assembly of teachers in the opinion of others.

In the event of disagreement, a relative majority (eighteen out of thirty-one) was of the opinion that the matter ought to be settled by a casting vote of the UER Council as a whole.

However, the scatter of opinions about this central point is quite wide: in one direction, it ranges from the select UER Council (4 votes) to the Director of the UER (4 votes), the Chairman of the University Council (2 votes) and even the Minister of Education (2 votes). In the other direction, it embraces the entire UER teaching staff (4 votes) and all the teachers and students combined (4 votes).

The average for the replies to the question of what criteria should govern the choice of DES subjects gave the following in order of preference:

- the subjects in which the teachers at Nanterre have specialised and are skilled,
- the emphasis which the teachers have decided to give to the DES course,
- the wishes of the students,
- the requirements of prospective employers.

The teachers justified the order in which they listed the criteria on the grounds that teachers can only conduct seminars on subjects in which they are competent to teach, which implies that teachers on the staff at Nanterre, by sole virtue of their presence, are entitled to conduct DES courses in preference to anybody from outside. They also stated that it was up to the students to decide in the light of the courses offered at Nanterre, whether they wanted to register for the DES courses there rather than somewhere else.

The DES students' assessment of the teachers and their teaching

A very substantial majority of the teachers subscribed to the principle of such an assessment being made.

In their view, its most acceptable purpose would be that of assessing the working pace and procedures, followed by the scope of the syllabus and the technical knowledge of the teachers. The least acceptable aim was that of assessing teaching ability.

Most of the teachers would prefer the assessment to be made during the course rather than at the end of the academic year.

If the assessment had to be made at the end of the year, a relative majority of the teachers would prefer it to take the form of individual assessments after a collective discussion.

A large majority wanted the assessment to be presented to the individual teachers, while 40 per cent agreed that it could be brought to the attention of the DES teachers when they met to review the course. Only five teachers agreed that the assessment could be communicated to the UER Council.

Half the teachers would prefer the scope of the assessments to be left to the sole discretion of the DES students, but 40 per cent of them agreed that suggestions could emanate from the Director of the UER Council, after consultation with the students.

Section III

## AN EVALUATION OF EMPLOYERS' VIEWS ON THE DES

### 1. Principal lessons drawn from current attitudes to the DES

#### The image projected by the DES

The management executives interviewed on this subject stressed the difficulty young diploma-holders experience in adapting to a career in business and industry, especially in large firms. The fact of the matter is that university training is, by its nature, theroretical and macro-economic. People with a diploma of high studies in economics are looked upon as economists, but this title is considered rather vague in French firms, few of which have an economic studies department. Fewer than two professionals out of ten regarded the DES holders as being administrators or businessmen.

All those who had employed DES holders emphasised their lack of practical know-how and their ignorance of the corporate environment.

#### Comparison with other diplomas

The DES seems to be the ideal training for economists, although its reputation only slightly outrivals that of the H.E.C. diploma.(1) In fact, personnel recruitment departments see the DES in economics and the HEC diploma as being on an equal footing. On the other hand, the DES is very seldom cited as being the ideal qualification for "business executives" or "administrators". The diplomas most commonly quoted are the following:

HEC (Institute of Higher Commercial Studies)
American diplomas
ESSEC (Higher School of Economics and Commerce)
INSEAD

#### The university and the "grandes écoles"

The DES suffers from the adverse prejudice which firms display towards everything that has to do with the university. Half the executives interviewed stated that they preferred to engage candidates who were graduates of "grandes écoles". Only one executive out of twenty-five expressed a preference for university graduates. However, 45 per cent of the executives were of the opinion that the origin of a candiate's degrees or diplomas was not the most important factor in recruitment.

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1) H.E.C. = Institute of Higher Commercial Studies

The preference displayed for the "grandes écoles" can be explained by the better training they offer, the better working methods instilled in their students and the fact that admission is more selective. The criterion most commonly put forward is the standard of training offered. In fact, eight executives out of ten considered that the business world's mistrust of university graduates could be allayed if university syllabuses were improved.

The DES and employment opportunities

A relative majority of the executives interviewed thought that DES-holders had difficulty in finding employment because their training was too theoretical and not technical enough and because the "grandes écoles" had a better reputation.

Moreover, firms do not always feel the need to employ economists and some executives said that they had never had applications from candidates holding the DES.

DES versus degree

It is considered better to have a DES than a degree, but that does not always mean that the starting salaries will be higher. In cases where a higher salary differential exists, it probably amounts to about 10 per cent. Almost all the executives interviewed refused to hazard a comparison of salaries spanning an entire career.

Attributions of DES-holders

Holders of the DES are usually employed in economic studies departments, where they are responsible for economic surveys, statistical studies and research and market surveys. But they may also be employed in finance, administration or sales and even in personnel. In other words, DES-holders have no clear-cut attributions in business and industry at the present time.

Status and remuneration of DES-holders

The vast majority of DES-holders are engaged at the professional level. However, in some firms, beginners with the DES are recruited at the grade immediately beneath the executive level.

The annual salary of a DES-holder at the start of his professional career would probably be in the region of 30,000 francs.(1) This is considered to be not much higher than the salary for a graduate with a first degree and about 10 per cent lower than that for a HEC graduate.

## 2. Qualitative conclusions on the ideal DES

### A) The need for diversification

At the present time the DES would appear to sanction a course of instruction in economics which has no value as a qualification as far as career prospects are concerned. The first task, after a more

1) It is recalled that the survey was conducted in 1971.

far-reaching survey among business and industrial firms, would be to define the sorts of duties that can be performed by an economist. The second exercise would then aim at providing courses geared to these different duties.

One personnel recruitment officer had this to say:

"Personally, I should like to see two streams or even more. One category of student could be directed towards economics in the conventional sense and people such as these could be employed in government departments or even in very large firms where they would become, say, specialists in short-term forecasting; the others would become business economists capable of wielding the tools of economic analysis in business and industry."

All the professionals interviewed were in favour of this differentiation which was also encountered in the replies given by the students. In fact, the minimum requirement seems to be a DES course centred on the problems of business and industry. The present type of training, which people want to be more thorough, may only be of interest to government departments; very large firms have very few posts that need to be filled by specialists in macro-economics.

One prospective employer said:

"I just want to warn you about one thing students often imagine. They think the economic departments in a firm spend most of their time studying the economic situation, the national development plan and so on. In this department, there are thirty-four of us and yet only two people are working on what you term macro-economics, and even then one of them is not a professional. There is no future for macro-economics in business".

Another employer said:

"Macro-economics doesn't make sense, unless you know you are going to be Minister of Finance".

B) <u>The DES centred on business and industry</u>

At this level, they did not agree on what policy ought to be followed. The differences of opinion seem to be bound up with the size of the firms where the professionsal work, but this assumption cannot be either confirmed or rejected from the limited number of people interviewed.

In the opinion of some professionsals, the DES should not provide specialised training, but should enable graduates to work as advisers at the highest level.

One recruitment officer had this to say:

"It would be the height of folly for the DES student to specialise in statistics or data-processing. It is not his role to specialise in a very limited field. Somebody with an economics diploma should be able to master the firm's economic problems".

By contrast, the others considered that there had to be some specialisation if economists were to be a success in business and industry. Training should emphasise the decision-making process but different specialities could exist side by side at the level of the diploma in higher economic studies: one could concentrate on marketing, another on investment yields, a third on planning, and so on.

Generally speaking, the executives did not find it easy to make suggestions for improving the overall definition of the DES or of the subjects it should comprise.

C) Subjects for the DES course

The feeling was that it would be dangerous to specialise in economics to the exclusion of all else, and emphasis was placed, for example, on the need to broaden the scope of the DES by including subjects from the human sciences.

One recruiter said:

"The trend should be towards training people who are psychologists, sociologists and economists all rolled into one, inasmuch as - in my view - the three subjects are very closely interrelated."

One employer's opinion was as follows:

"I think it's essential for economists to know a good deal more than just economics. It's a tragedy for people to do only economics".

Hardly any of the executives interviewed attempted to define an ideal syllabus for the DES. Some of them were somewhat sceptical about the titles of some of the courses. One executive dwelt at length on some data-processing courses which enabled students to talk intelligently about hardware and software and even to display their sound grasp of theory but which, in the end, still left them incapable of coping, for example, with the problems involved in "computerising" a firm. However, if the information given in the ten interviews is put in order, the following quite comprehensive list of subjects can be drawn up:

- econometrics
- marketing
- mathematics of finance
- general and cost accounting
- data-processing
- operational research
- commercial law and, in particular, company law
- planning
- a case study of a typical country (e.g. Japan).

In some subjects, such as accounting or data-processing, the economist would not be expected to replace accountants or computer specialists but he should be capable of solving simple problems in either subject and of conversing with such specialists.

D) Teaching staff

Universities in France have always bred their own teachers. In fact, the executives were of the opinion that the shortcomings of university teaching are largely due to the fact that teachers are not recruited from outside the university circle. Reference was frequently made to the practice in American universities, where teachers are often former businessmen or industrialists, as a yardstick for evolving an ideal DES. Some of the executives believe that a similar system, by introducing a more pragmatic approach into the course, would solve the adjustment problems which university students currently have to face when they start working in business or industy.

In the opinion of one recruiter:

"The system ought to be introduced before the DES, say during the first year of the degree course. If they are brought into contact with people already working in business or industry, students can be put on the right track.

On the other hand, if businessmen start lecturing at universities on a permanent basis, they will have a much better understanding of the needs and abilities of the students".

However, it is obvious that executives will be more prepared to teach in the "grandes écoles" than in universities. All the executives interviewed stressed the remarkable contribution that people with practical experience could make by lecturing on the diploma course, but none of them offered to do so.

E) The problems of awarding a national or university diploma

Suspicion of universities, as we have already seen, is a very marked trait among some executives and it is also reflected in the clear-cut preference expressed for a diploma specific to each university. In the final analysis, a university diploma has no intrinsic value. The important thing is the candidate's ability. Recruitment personnel want to know where the candidate comes from, how he was trained and who trained him. Moreover, competition can only work to the advantage of the standard of teaching dispensed in the different universities:

One employer said:

"I should like to see the universities really competing against each other. The diploma as such is of no importance. ... I try to find out who the professors were".

From the quantitative standpoint, however, the preference for a specific diploma for each university is not upheld. The discrepancy comes from the fact that the problem was broached simultaneously during the interviews. Presumably the executives who did not mention it were satisfied with the national scope of the diploma.

3. Quantitative conclusions on the ideal DES

The aim of the second part of the questionnaire was to elicit suggestions as to how the DES could be improved from representatives of firms liable to employ students holding the DES.

A) Scope of the course

- 51 per cent of the executives interviewed thought that the DES ought to be an introduction to research in applied economics;
- 30 per cent thought that it ought to provide a general professional education;
- 26 per cent thought that it ought to provide a specialised professional education.

Business firms are not very interested in courses designed to train people for research in pure economics or for the teaching profession.

All the executives, regardless of their background, expressed very similar preoccupations. However, applied economic research was esteemed more highly in large firms (56 per cent) than in small and medium firms (38 per cent).

Subjects taught

The fact that the executives were reluctant to "draw up the menu" for a university course emerged very clearly at the qualitative stage and was confirmed during the survey. Only 32 per cent had any ideas on what the syallabus of the DES programme ought to be.

a) Subjects mentioned without prompting

On average, each professional mentioned only two subjects. These were as follows:

| | |
|---|---|
| - Economics | 34 per cent |
| - Management | 31 per cent |
| - Mathematics and statistics | 22 per cent |
| - Marketing | 16 per cent |
| - Forecasting | 16 per cent |
| - Law | 12 per cent |
| - Accounting | 12 per cent |

Other subjects mentioned included human relations, administration and data-processing.

b) Subjects chosen from a select list

All the executives interviewed were presented with a list of 45 selected subjects taken from the list of 100-odd subjects that had been circulated among fourth-year economics students and has subsequently been sclaed down to a list of 38 headings.

A large number of answers were given to this question, each professional mentioning 13 subjects on average, so much so that only subjects chosen by more than one out of every three professionals are listed below:

| | Percentage |
|---|---|
| Economic analysis applied to decision-making in private-sector firms | 57% |
| Budget control | 53% |
| Mathematics of economics | 50% |
| Mobilisation of finance for business and industry | 46% |
| Macro-economic forecasting methods | 46% |
| Quantitative management methods (PERT, planning, scheduling) | 43% |
| Analytical accounting | 42% |
| Mathematical methods applied to financial decision-making | 41% |
| Mathematical techniques applied to marketing | 41% |
| Financial analysis | 40% |
| Business acounting | 39% |
| General accounting | 37% |
| Commercial law | 36% |
| Company law | 36% |
| Theoretical and economic problems of consumption | 36% |
| Monetary conditions of economic development | 35% |
| Economics of product distribution | 34% |

Two subjects not on the list were nevertheless mentioned by employers or executives from firms already employing DES-holders. These were:

- statistical methods in econometrics (38 per cent of employers and 37 per cent of executives whose firms employ DES-holders);
- surveys of the economic situation and application of findings (38 per cent of employers and 37 per cent of executives whose firms employ DES-holders).

c) Foreign languages

90 per cent of the executives were convinced that the study of a foreign language should be compulsory at the DES level. In the opinion of the 9 per cent who replied in the negative to this question,

some thought that students ought already to have mastered a foreign language by the time they reach the level of the DES. 99 per cent of the executives mentioned English and 67 per cent German.

Less than 10 per cent of the executives mentioned other languages such as Spanish, Russian, Italian or Chinese.

B) Types and methods of teaching

Types of teaching

- 46 per cent of the executives expressed a preference for the combination "lecture courses + practical training";
- 35 per cent of the executives preferred the combination "lecture course + practical training + personal research";
- 13 per cent of the executives preferred the combination "practical training + personal research";
- 4 per cent of the executives preferred the combination "lecture courses + personal research";
- 2 per cent did not give an answer.

In the executives' opinion, practical training was clearly one of the key features of higher education, since only 4 per cent of the respondents did not include it in the ideal DES.

Teaching methods in the "lecture" system

75 per cent of the executives interviewed were in favour of talks by people from commerce or industry. Next came case studies (67 per cent), discussion groups (46 per cent), the study of "dossiers" (42 per cent), lectures by the university teaching staff (28 per cent) and lectures given by the students themselves (12 per cent).

The executives would like universities to have extra-mural contacts and to learn about the problems of the business world from the people who have to deal with them. This was considered an essential requirement if teaching was to be adapted to commercial and industrial practice.

On the whole, there were very few differences between subcategories, and yet some of those displayed were very marked, for example those governed by age. While 85 per cent of the executives under 35 years of age advocated case studies, 90 per cent of the executives over 50 were in favour of the presentation of papers by working professionals because they felt certain that they had something tangible to convey by way of experience. It is also noteworthy that 42 per cent of the executives who had had some contact with Nanterre were in favour of lectures given by the teaching staff.

One question was asked specifically to test whether there was any preference in favour of students working in groups or by themselves. The study revealed that there was a definite preference

for individual work. This emerges very clearly from the comments which accompanied some of the questionnaires: the executives were rather suspicious of group work because they felt that the workload was not distributed fairly.

Teaching staff

74 per cent of the executives would be in favour of a system whereby the staff for the course would include both working professionals and university teachers.

18 per cent were in favour of a course conducted exclusively by working professionals.

Only 7 per cent opted for a course conducted exclusively by university teachers.

Here again, the main concern is to make university courses more "practical".

Length of the DES course

The executives were often unaware of the length of the DES course. In their opinion, the ideal length would be in the region of eighteen months (26 per cent) to two years (33 per cent) if it is considered that a halfway solution can be found.

23 per cent in favour of a DES course lasting only one year.

C) Practical training and the DES

In the opinion of 69 per cent of the executives, a practical training period, regardless of whether it carries a mark or the students are required to draft a report, should be an integral part of the diploma course. Only 19 per cent considered that there was no point in requiring the training period to count towards the diploma.

Respondents most in favour of making the training period compulsory were actual or prospective employers of DES-holders.

12 per cent of the executives did not express an opinion.

Type of training period

61 per cent of the executives expressed a preference for an "operational" training period in a department of a firm corresponding to the type of training received. Only 23 per cent were in favour of a training period involving work in all departments. These preferences were followed by a dissertation subject proposed by the firm (20 per cent), a training period as a workman or office employee (10 per cent), research on the firm at the university (only 2 per cent) and an introduction to the job (2 per cent).

23 per cent of the young executives and 22 per cent of those who had come up through the ranks advocated a training period as a workman or office employee, but none of the executives who had had contact with Nanterre mentioned this possibility.

Optimum length of training period

Bearing in mind the interests of both the firms involved and the student trainees, the professionals were most in favour of long-term training periods of the following length:

- three months 36%
- four to six months 26%
- two months 23%
- more than six months 10%

Most suitable time for practical training

32 per cent of the executives interviewed did not consider that the choice of the most suitable time for the practical training was a problem. However, it was very clear from the answers of those who did consider the matter important that practical training was meaningful only if it took place at a time when the firm was in full swing, and 58 per cent of the executives interviewed were in favour of a long training period in the course of the academic year. This opinion was expressed even more clearly by the employers (68 per cent).

Only 6 per cent of the professionals were in favour of training periods during the university vacations.

Remuneration of training periods

In the opinion of 90 per cent of the executives, some remuneration is necessary. Only 6 per cent were hostile to the idea and 4 per cent did not express an opinion. There was no very marked difference between the categories interviewed, except for the fact that executives over 50 years of age were not in favour of remunerating students during their practical training.

46 per cent of the professionals in favour of paying trainees considered that the monthly salary ought to be in the region of 1,000 to 1,300 francs.

11 per cent were only prepared to pay between 500 and 1,000 francs, while 11 per cent suggested 1,300 to 1,500 francs.

8 per cent were prepared to pay between 1,500 and 2,00 francs, the last-mentioned figure being the upper limit for the monthly salary trainees could expect to earn.

The impression gained was that small and medium-sized firms were prepared to pay their trainees more than large firms. In fact, 38 per cent of the executives from firms with less than 500 salaried workers would be prepared to pay more than 1,300 francs to trainees, whereas only 12 per cent of the executives from firms employing more than 500 salaried workers were prepared to offer the same amount.

Organisation of training periods

The executives interviewed for the qualitative analysis expressed regret at the fact that there were no authorised spokesmen representing the university with whom they could discuss the joint organisation of training periods, and they stressed the superior position of the "grandes écoles" in that regard. In the questionnaire, the executives were asked who they thought should be responsible for training periods in the university. The answers were as follows:

- 52 per cent were in favour of the professor
- 32 per cent opted for the future trainees
- 11 per cent preferred the university
- only 7 per cent were in favour of a student group.

A distinct preference was expressed for holding direct discussions with fully-authorised individual officials rather than with an intangible administrative body. These conclusions concur with those arrived at in the qualitative stage. Training periods ought to be organised at the level of small teaching units.

D) Nature of the diploma awarded

The question asked was whether the diploma ought to be reserved exclusively for students following a normal university career and whether it ought to be awarded on a national basis.

Possibility of working for the DES after a break in studies

53 per cent of the executives were in favour of a DES course that would be open to students other than those coming straight from the university degree. 35 per cent were not in favour of this proposal, while 14 per cent did not express an opinion.

The choice between a university and a national diploma

Each system had an almost equal number of supporters.

- 41 per cent expressed a preference for a national diploma;
- 44 per cent were in favour of a specific diploma awarded by each university;
- The remainder (15 per cent) did not express an opinion or considered that the problem was not important.

The distribution differed to an appreciable extent with the category interviewed. Those in favour of the national diploma were mainly as follows:

- personnel recruitment officers (44 per cent)
- executives over 50 years of age (50 per cent)
- executives who had had contact with Nanterre (53 per cent).

On the other hand, executives in favour of a diploma specific to each university came from the following categories:

- employers (46 per cent)
- firms already employing DES-holders (50 per cent)
- graduates from the "grandes écoles" (52 per cent).

B) Information about the DES

Preference was expressed for a system for disseminating information about the DES on a national scale (55 per cent) rather than through each university (25 per cent) or through regional channels (10 per cent).

In the executives' opinion, the dissemination of information on the DES had to fulfil the dual requirements of effectiveness and speed. Executives do not like to have to travel merely to attend a briefing meeting. That is why 68 per cent preferred the publication of a brochure and only 23 per cent were in favour of briefings given by university teachers. The suggestions expressed on this subject concern the organisation of discussion sessions like those run by the "grandes écoles" and of information days and the establishment of direct personal contacts between representatives of firms and the professors responsible for the diploma.